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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Francois MALLET et al.

Application No.: 10/069,883

Filed: May 1, 2002

Group Art Unit: Unknown

Examiner: Unknown

Docket No.: 112062

For: METHOD FOR DETECTING THE EXPRESSION OF AN ENVELOPE PROTEIN OF A HUMAN ENDOGENOUS RETROVIRUS AND USES OF AGENE CODING FOR SAID PROTEIN

INFORMATION DISCLOSURE STATEMENT

Director of the U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- ☒ 2. References 1-3 and 21-30 were cited in the International Search Report. An English language version of the International Search Report is attached for the Examiner's information.
- ☒ 3. An English-language Abstract of the non-English language reference is attached hereto.

Respectfully submitted,

William B. Berridge
Registration No. 30,024

Philip A. Caramanica
Registration No. 51,528

WPB:PAC/jam

Date: January 14, 2003

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

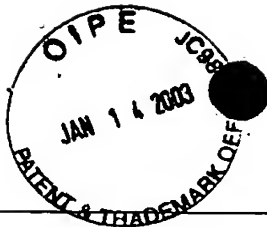
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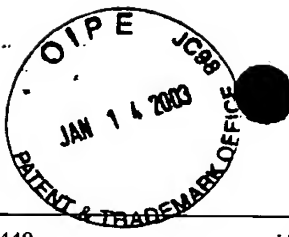
Form PTO-1449 (REV. 8-83)		US Dept. of Commerce PATENT & TRADEMARK OFFICE		ATTY DOCKET NO. 112062		APPLICATION NO. 10/069,883	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				APPLICANT(S) Francois MALLET et al.			
				FILING DATE May 1, 2002		GROUP Unknown	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
	1.	WO 99/02696 (w/Eng. Abstract)	01/1999	WIPO			
	2.	WO 99/60020 (w/Eng. Abstract)	11/1999	WIPO			
	3.	WO 99/26972 (w/Eng. Abstract)	06/1999	WIPO			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
	4.	J.J. SKEHEL et al., "Changes in the Conformation of Influenza Virus Hemmagglutinin at the pH Optimum of Virus-Mediated Membrane Fusion," <u>Proc. Natl. Acad. Sci. USA</u> , Vol. 79, pp. 968-972, February 1982.					
	5.	J.S. JONES et al., "Cell Fusion Induced by the Murine Leukemia Virus Envelope Glycoprotein," <u>Journal of Virology</u> , Vol. 67, No. 1, pp. 67-74, January 1993.					
	6.	P.J.W. VENABLES et al., "Abundance of an Endogenous Retroviral Envelope Protein in Placental Trophoblasts Suggests a Biological Function," <u>Virology</u> , 211, pp. 589-592, 1995.					
	7.	N. de PARSEVAL et al., "Physiological Knockout of the Envelope Gene of the Single-Copy ERV-3 Human Endogenous Retrovirus in a Fraction of the Caucasian Population," <u>Journal of Virology</u> , Vol. 72, No. 4, pp. 3442-3445, April 1998.					
	8.	D. OTT et al., "Sequence Analysis of Amphotropic and 10A1 Murine Leukemia Viruses: Close Relationship to Mink Cell Focus-Inducing Viruses," <u>Journal of Virology</u> , Vol. 64, No. 2, pp. 757-766, February 1990.					
	9.	G. KOHLER et al., "Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity," <u>Nature</u> , Vol. 256, pp. 495-497, August 1975.					
	10.	G. GALFRE et al., "Antibodies to Major Histocompatibility Antigens Produced by Hybrid Cell Lines," <u>Nature</u> , Vol. 266, pp. 550-552, April 1977.					
	11.	A. RODA et al., "Production of High-Titer Antibody to Bile Acids," <u>Journal of Steroid Biochemistry</u> , Vol. 13, pp. 449-454, 1980.					
	12.	B.R. BLAZAR et al., "Anti-CD3eF(ab) ₂ Fragments Inhibit T Cell Expansion in Vivo During Graft-Versus-Host Disease or the Primary Immune Response to Nominal Antigen ^{1,2} ," <u>The Journal of Immunology</u> , Vol. 159, pp. 5821-5833, 1997.					
	13.	R.E. BIRD et al., "Single-Chain Antigen-Binding Proteins," <u>Science</u> , Vol. 242, pp. 423-426, October 1988.					
	14.	F. ARAKAWA et al., "Cloning and Sequencing of the V _H and V _K Genes of an Anti-CD3 Monoclonal Antibody, and Construction of a Mouse/Human Chimeric Antibody," <u>J. Biochem.</u> Vol. 120, No. 3, pp. 657-662, 1996.					
	15.	V.K. CHAUDHARY et al., "A Recombinant Immunotoxin Consisting of Two Antibody Variable Domains Fused to <i>Pseudomonas</i> Exotoxin," <u>Nature</u> , Vol. 339, pp. 394-397, June 1989.					
EXAMINER					DATE CONSIDERED		
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Date: January 14, 2003

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
	16.	F. COSSET et al., "High-Titer Packaging Cells Producing Recombinant Retroviruses Resistant to Human Serum," <u>Journal of Virology</u> , Vol. 69, No. 12, pp. 7430-7436, December 1995.					
	17.	Y. TAKEUCHI et al., "Type C Retrovirus Inactivation by Human Complement is Determined by both the Viral Genome and the Producer Cell," <u>Journal of Virology</u> , Vol. 68, No. 12, pp. 8001-8007, December 1994.					
	18.	A. REIN et al., "Function of the Cytoplasmic Domain of a Retroviral Transmembrane Protein: p15E-p2E Cleavage Activates the Membrane Fusion Capability of the Murine Leukemia Virus Env Protein," <u>Journal of Virology</u> , Vol. 68, No. 3, pp. 1773-1781, March 1994.					
	19.	F. COSSET et al., "Retroviral Retargeting by Envelopes Expressing an N-Terminal Binding Domain," <u>Journal of Virology</u> , Vol. 69, No. 10, pp. 6314-6322, October 1995.					
	20.	S. YANT et al., "Identification of Cytoplasmic Tyr-X-X-Leu Motif Essential for Down Regulation of the Human Cell Receptor CD46 in Persistent Measles Virus Infection," <u>Journal of Virology</u> , Vol. 71, No. 1, pp. 766-770, January 1997.					
	21.	J. BLOND et al., "Molecular Characterization and Placental Expression of HERV-W, a New Human Endogenous Retrovirus Family," <u>Journal of Virology</u> , Vol. 73, No. 2, pp. 1175-1185, February 1999.					
	22.	C.S. TAILOR et al., "A Sodium-Dependent Neutral-Amino-Acid Transporter Mediates Infections of Feline and Baboon Endogenous Retroviruses and Simian Type D Retroviruses," <u>Journal of Virology</u> , Vol. 73, No. 5, pp. 4470-4474, May 1999.					
	23.	J.E.J. RASKO et al., "The RD114/Simian Type D Retrovirus Receptor is a Neutral Amino Acid Transporter," <u>Proc. Natl. Acad. Sci. USA</u> , Vol. 96, pp. 2129-2134, March 1999.					
	24.	B. WANG et al., "Molecular Cloning, Expression, and Biological Characterization of an HTLV-II Envelope Glycoprotein: HIV-1 Expression Is Permissive for HTLV-II-Induced Cell Fusion," <u>Aids Research and Human Retroviruses</u> , Vol. 9, No. 9, pp. 849-860, 1993.					
	25.	L. LIN et al., "Expression of Endogenous Retrovirus ERV-3 Induces Differentiation in BeWo, a Choriocarcinoma Model Of Human Placental Trophoblast," <u>Placenta</u> , Vol. 20, No. 1, pp. 109-118, January 1999.					
	26.	B.J. DORANZ et al., "A Small-Molecule Inhibitor Directed Against the Chemokine Receptor CXCR4 Prevents its use as an HIV-1 Coreceptor," <u>Journal of Experimental Medicine</u> , Vol. 186, No. 8, pp. 1395-1400, October 1997.					
	27.	N.E. AVISSAR et al., "Characterization of Antibodies to Intestinal NA ⁺ Dependent Neutral Amino Acid Transporter (B ⁰)," <u>Gastroenterology</u> , Vol. 118, No. 4, April 2000.					
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| 28. | C. VOISSET et al., "Chromosomal Distribution and Coding Capacity of the Human Endogenous Retrovirus HERV-W Family," <i>Aids Research and Human Retroviruses</i> , Vol. 16, No. 8, pp. 731-740, May 2000. |
| 29. | S. MI et al., "Syncytin is a Captive Retroviral Envelope Protein Involved in Human Placental Morphogenesis," <i>Nature</i> , Vol. 403, No. 6771, pp. 785-789, April 2000. |
| 30. | J. BLOND et al., "An Envelope Glycoprotein of the Human Endogenous Retrovirus-W is Expressed in the Human Placenta and Fuses cells Expressing the Type D Mammalian Retrovirus Receptor," <i>Journal of Virology</i> , Vol. 74, No. 7, pp. 3321-3329, April 2000. |
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